SUBJECT INDEX

	515	Tom Leighton—Letter from the Editor
ARTIFICIAL INTELLIGENCE	775	B. S. Stewart and C. C. White—Multiobjective A*
COMBINATORICS AND GRAPH THEORY	255	E. M. Arkin, C. H. Papadimitriou, and M. Yannakakis—Modularity of Cycles and Paths in Graphs
	815	H. N. Gabow and R. Tarjan—Faster Scaling Algorithms for General Graph Matching Problems
COMPUTATIONAL GEOMETRY	516	M. J. Atallah, D. Z. Chen, and H. Wagener—An Optimal Parallel Algorithm for the Visibility of a Simple Polygon from a Point
	275	D. Dobkin and S. Suri-Maintenance of Geometric Extrema
	1	M. Dyer, A. Frieze, and R. Kannan—A Random Polynomial Time Algorithm for Approximating the Volume of Convex Bodies
	18	J. S. B. Mitchell and C. H. Papadimitriou—The Weighted Region Problem: Finding Shortest Paths through a Weighted Planar Subdivision
	74	K. Mulmuley—A Fast Planar Partition Algorithm, II
COMPUTER SYSTEMS	299	R. E. Bryant—A Methodology for Hardware Verification Based on Logic Simulation
DATABASE THEORY	534	T. Imielinski—Abstraction in Query Processing
	329	Y. Ioannidis and E. Wong-Towards an Algebraic Theory of Recursion
	120	Y. Sagiv—Evaluation of Queries in Independent Database Schemes
DATA STRUCTURE AND ALGORITHMS	104	D. E. Willard—Optimal Sample Cost Residues for Differential Database Batch Guery Problems
DISTRIBUTED	382	R. Fagin, J. Y. Halpern, and M. Y. Vardi—A Model-Theoretic Analysis of Knowledge
GRAPH THEORY	162	G. N. Frederickson-Planar Graph Decomposition and All Pairs Shortest Paths
LOGIC	887	S. L. Bloom and Z. Ésik-Floyd-Hoare Logic in Iteration Theories
	935	J. Y. Halpern and Y. Shoham-A Propositional Modal Logic of Time Intervals
	559	J. Hsiang and M. Rusinowitch—Proving Refutational Completeness of Theorem-Proving Strategies: The Transfinite Semantic Tree Method
	588	W. Marek and M. Truszczynski-Autoepistemic Logic
	963	M. Tiomkin and M. Kaminski-Nonmonotonic Default Modal Logics
LOGIC PROGRAMMING	205	V. Chandru and J. N. Hooker—Extended Horn Sets in Propositional Logic
	620	A. Van Gelder, K. A. Ross, and J. S. Schlipf—The Well-Founded Semantics for General Logic Programs
OPERATIONS RESEARCH	985	E. Balas, D. Miller, J. Pekny, and P. Toth—A Parallel Shortest Augmenting Path Algorithm for the Assignment Problem
PERFORMANCE ANALYSIS	1005	P. Glasserman—Structural Conditions for Perturbation Analysis of Queuing Systems
STRING PROCESSING	651	M. Crochemore and D. Perrin-Two-Way String-Matching
SYSTEM MODELING AND ANALYSIS	429	N. Bambos and J. Walrand—On Stability and Performance of Parallel Processing Systems
	676	K. W. Ross and D. D. Yao—Optimal Load Balancing and Scheduling in a Distributed Computer System
THEORY OF	495	N. Alon, A. K. Dewdney, and T. J. Ott—Efficient Simulation of Finite Automata

THEORY OF COMPUTATION

472

691 O. Goldreich, S. Micali, and A. Wigderson-Proofs that Yield Nothing but Their Validity or All Languages in NP Have Zero-Knowledge Proof Systems 222 G. Kissin-Upper and Lower Bounds on Switching Energy in VLSI

1026 B. Berger and J. Rompel—Simulating (log^on)-Wise Independence in NC

A. Condon-Space-Bounded Probabilistic Game Automata

- 453 Y. Mansour, B. Schieber, and P. Tiwari—A Lower Bound for Integer Greatest Common Divisor Computations
- 730 C. M. Özveren, A. S. Willsky, and P. J. Antsaklis—Stability and Stabilizability of Discrete Event Dynamic Systems
- 753 J. Torán—Complexity Classes Defined by Counting Quantifiers

AUTHOR INDEX

ALON, N.	495	Efficient Simulation of Finite Automata by Neural Nets
ANTSAKLIS, P. J.	730	See Özveren, C. M.
ARKIN, E. M.	255	Modularity of Cycles and Paths in Graphs
ATALLAH, M. J.	516	An Optimal Parallel Algorithm for the Visibility of a Simple Polygon from a Point
BALAS, E.	985	Parallel Shortest Augmenting Path Algorithm for the Assignment Problem
BAMBOS, N.	429	On Stability and Performance of Parallel Processing Systems
BERGER, B.	1026	Simulating (log ^c n)-Wise Independence in NC
BLOOM, S. L.	887	Floyd-Hoare Logic in Iteration Theories
BRYANT, R. E.	299	A Methodology for Hardware Verification Based on Logic Simulation
CHANDRU, V.	205	Extended Horn Sets in Propositional Logic
CHEN, D. Z.	516	See Atallah, M. J.
CONDON, A.	472	Space-Bounded Probabilistic Game Automata
CROCHEMORE, M.	651	Two-Way String-Matching
DEWDNEY, A. K.	495	See Alon, N.
DOBKIN, D.	275	Maintenance of Geometric Extrema
DYER, M.	1	A Random Polynomial Time Algorithm for Approximating the Volume of
		Convex Bodies
ÉSIK, Z.	887	See Bloom, S. L.
FAGIN, R.	382	A Model-Theoretic Analysis of Knowledge
FREDERICKSON, G. N.	162	Planar Graph Decomposition and All Pairs Shortest Paths
FRIEZE, A.	1	See Dyer, M.
GABOW, H. N.	815	Faster Scaling Algorithms for General Graph Matching Problems
GLASSERMAN, P.	1005	Structural Conditions for Perturbation Analysis of Queuing Systems
GOLDREICH, O.	691	Proofs that Yield Nothing but Their Validity or All Languages in NP Have Zero-Knowledge Proof Systems
HALPERN, J. Y.	382	See Fagin, R.
	935	A Propositional Modal Logic of Time Intervals
HOOKER, J. N.	205	See Chandru, V.
HSIANG, J.	559	Proving Refutational Completeness of Theorem-Proving Strategies: The Transfinite Semantic Tree Method
IMIELINSKI, T.	534	Abstraction in Query Processing
IOANNIDIS, Y.	329	Towards an Algebraic Theory of Recursion
KAMINSKI, M.	963	
KANNAN, R.	1	
KISSIN, G.	222	
LEIGHTON, T.	515	
MANSOUR, Y.	453	A Lower Bound for Integer Greatest Common Divisor Computations
MAREK, W.	588	
MICALI, S.		
MILLER, D.	985	See Balas, E.
MITCHELL, J. S. B.	18	
MULMULEY, K.	74	
OTT, T. J.	495	See Alon, N.
ÖZVEREN, C. M.	730	Stability and Stabilizability of Discrete Event Dynamic Systems
PAPADIM!TRIOU, C. H.	18	
,	255	
PEKNY, J.	985	
PERRIN, D.	651	
ROMPEL, J.	1026	
ROSS, K. A.	620	
ROSS, K. W.	676	
RUSINOWICH, M.	559	
SAGIV, Y.	120	91
SCHIEBER, B.	453	
SCHLIPF, J. S.	620	
SHOHAM, Y.	935	
STEWART, B. S.	775	
SIEWARI, B. S.	113	manospedio n

SURI, S. 275 See Dobkin, D. TARJAN, R. B15 See Grabow, H. N. TIWARI, P. 453 See Mansour, Y. TIOMKIN, M. 963 Nonmonotonic Default Modal Logics TORAŃ, J. 753 Complexity Classes Defined by Counting Quantifiers TOTH, P. 985 See Balas, E. TRUSZCZYNSKI, M. 588 See Marek, W. VAN GELDER, A. 620 The Well-Founded Semantics for General Logic Programs VARDI, M. Y. 382 See Fagin, R. WAGENER, H. 516 See Atallah, M. J. WALRAND, J. 429 See Bambos, N. WHITE, C. C. 775 See Stewart, B. S. WIGDERSON, A. 691 See Goldreich, O. WILLARD, D. E. 104 Optimal Sample Cost Residues for Differential Database Batch Query Problems WILLSKY, A. S. 730 See Özveren, C. M. WONG, E. 329 See loannidis, Y. YANNAKAKIS, M. 255 See Arkin, E. M. YAO, D. D. 676 See Ross, K. W.

